

**REMARKS**

Reconsideration and allowance of the subject application are respectfully requested. Claims 1-22 are all the claims pending in the application. In response to the Office Action, Applicant respectfully submits that the claims define patentable subject matter.

Claims 6, 7, 18, and 19 remain rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Claims 1 and 11 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over DiFazio (U.S. Patent Application Publication No 2003/0063576) in view of Scott et al. (U.S. Patent No. 6,154,486, hereafter “Scott”). Claims 1, 2, 8, 11, 12, 16, 17, and 20 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott in view of DiFazio. Claims 4, 5, 14, and 15 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott in view of DiFazio and further in view of Karlsson et al. (U.S. Patent Application Publication No. 2002/0057730, hereafter “Karlsson”). Claims 10 and 22 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Scott in view of DiFazio and further in view of Bhatoolaul (U.S. Patent Application Publication No. 2001/0046864, hereafter “Bhatoolaul”). Claims 3, 9, 13, and 21 remain objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant notes that prior art rejections were not applied to claims 6, 7, 18, and 19. Applicant respectfully traverses the prior art rejections.

With respect to the rejection under 35 U.S.C. § 112, second paragraph, by this Amendment, Applicant has changed the dependency of claims 7 and 19. Accordingly, the Examiner is requested to remove the § 112 rejection.

In the previous Response filed on November 7, 2007, Applicant pointed out that there is no teaching or suggestion in DiFazio of the feature “a detection magnitude is evaluated on the basis of the estimated channel parameters and of a correlation between a signal received at the receiver system and the predetermined digital sequence, wherein the detection magnitude is compared with an adaptive detection threshold to decide whether the signal burst is detected”, as recited in claim 1 and analogously recited in independent claim 11.

Applicant further noted that the comparator 94 of DiFazio takes in two inputs, an energy estimate and a noise estimate, and then outputs a signal to the data estimation device. Even assuming *arguendo* that the detection magnitude was the output of the signal power estimation device as alleged, for the “comparison” of claim 1 to correspond to the comparator 94, the other input to the comparator 94 would need to be an adaptive detection threshold. It is not. The other signal going into the comparator is a noise estimate (Fig. 9). A noise estimate is not an adaptive detection threshold. Furthermore, the alleged adaptive detection threshold, the noise estimate, would also need to be adaptive and DiFazio does not disclose the noise estimate as being adaptive.

In response, the Examiner restated verbatim the assertion made in the previous Office Action dated May 7, 2007 and added the following brief statement:

Examiner asserts that DiFazio discloses a detection magnitude (i.e. the signal power) is evaluated on the basis of estimated channel parameters (see Figs. 2, 3 and paragraph 0027) and a correlation between a signal received at the receiver system and the predetermined digital sequence (see matched filter 12), wherein the

detection magnitude is compared (see comparator 14) with a detection threshold (see the threshold in Fig. 3) to decide whether the signal burst is detected.<sup>1</sup>

Applicant again respectfully disagrees with the Examiner's position. Independent claim 1 and analogous independent claim 11 require that a detection magnitude is evaluated on the basis of estimated channel parameters and of a correlation between a received signal and a predetermined digital sequence, wherein the detection magnitude is compared with an adaptive detection threshold to decide whether the signal burst is detected. Applicant respectfully submits that these features of the claims are neither taught, suggest nor rendered obvious by the cited references.

The Examiner appears to read the claimed "detection magnitude" on the signal power (FIG. 3) of DiFazio. Even assuming *arguendo* that the claimed detection magnitude was the output of the signal power estimator 13, there is no teaching or suggestion in DiFazio that the signal power is evaluated on the basis of estimated channel parameters and a correlation between a signal received at the receiver system and a predetermined digital sequence, as required by the claims.

DiFazio discloses that the signal power estimator (13) receives the output of a matched filter 12, estimates the signal power in the received communication and forwards the signal power to the comparator 14. Nowhere does DiFazio disclose that the signal power is evaluated on the basis of estimated channel parameters and of a correlation between a received signal and a predetermined digital sequence.

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<sup>1</sup> Page 2 of the Office Action dated January 24, 2008.

Further, Applicant respectfully submits that there is no teaching or suggestion in DiFazio of the feature “wherein the detection magnitude is compared with an adaptive detection threshold to decide whether the signal burst is detected”, as recited in the claims.

DiFazio discloses that the comparator 14 compares the estimated signal power output by the signal power estimator 13, with a scaled estimated noise power output by the noise estimator 11. The result of the comparison is used to indicate whether a particular coded composite transport channel (CCTrCh) is in full discontinuous transmission state (DTX). Applicant respectfully submits that a noise estimate is not an adaptive detection threshold. Accordingly, there is no teaching or suggestion in DiFazio that the detection magnitude is compared with an adaptive detection threshold, as required by the claims.

The Examiner appears to acknowledge that DiFazio does not teach or suggest an adaptive detection threshold. The Examiner thus relies on Scott to cure this conceded deficiency, and cites the second paragraph of Scott as allegedly disclosing this aspect of the claims. Applicant respectfully submits that Scott has little or no relevance to the claimed invention.

The second paragraph of Scott discloses a method for detecting four correlation peaks in test signal locations. A threshold signal is dynamically varied in response to a measured background noise level. When the signal level at a test signal location exceeds the threshold signal level, a comparator state changes. Applicant respectfully submits that there is no teaching or suggestion in Scott that “the detection magnitude is compared with an adaptive detection threshold to decide whether the signal burst is detected”, as recited in the claims.

Further, Applicant again respectfully submits that the Scott/DiFazio combination suffers from the same deficiencies as the DiFazio/Scott combination, for reasons that need not be set out in any detail beyond that already mentioned above. Applicant therefore respectfully requests the Examiner to withdraw this rejection as well, with respect to the independent claims and also their respective dependent claims

Still further, Karlsson and Bhatooolaul clearly do not cure the deficiencies of DiFazio and Scott. Even all four references together would not meet the express requirements of claims 1 and 11.

Accordingly, Applicant respectfully submits that independent claims 1 and 11 should be allowable because the cited reference do not teach or suggest all of the features of the claims. Claims 2-10 and 12-22 should also be allowable at least by virtue of their dependency on independent claims 1 and 11.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116  
U.S. Appln. No.: 10/719,776

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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